

## ISWALD – AETHER 3.2 C

Wide Angle & Low Distortion  
Integrated System



### APPLICATIONS

Observation

- Enhanced vision system camera

Security

- Homeland security

Assistance

- Driving aid
- Landscape camera
- Flight test

### INNOVATIONS & FEATURES

- Freeform optics
- Large FOV with low distortion
- Low-light conditions
- Low power consumption
- 1/1.8" 3.2 MP CMOS Global Shutter
- Full HD
- Dynamic Range > 74 dB
- E@SNR1 < 15 mLux

ISWALD – AETHER

**The Most Compact for Low Light and Wide Angle**

**OPTRONIC CHARACTERISTICS**

FOV DISTORSION SENSITIVITY SPECTRAL BAND SENSOR FTM FOCAL F# SUN PROTECTION EMVA	Field of View [FOV]	Geometric Distortion	Input Light Range	Spectral Band
	Horizontal 110° Vertical 77°	< 5%	0.2 to 100,000Lux	350 to 650nm
	Sensor	Color	Resolution [H×V]	Pixel Size [H×V]
	CMOS 3.2 M Color Global shutter	Bayer RGB	2048(H) × 1536(V)	3.45 μm × 3.45 μm
	FTM	Focal Length	Numerical Aperture	Sun Protection
	>20% @ 100lp/mm	1.9 mm	2	> 30 mn (1 kW/m²)
	Qe @520 nm	Read-out Noise	Saturation	Dynamic Range
	>60%	<2 e <sup>-</sup> (RAW)	>10,000 e <sup>-</sup> (RAW)	>74 dB
	SNR	DSNU	PRNU	E@ SNR1
>43 dB (Y)	<1 e <sup>-</sup> (RAW)	<1% (RAW)	15mLux	

**FUNCTIONS**

BIT GAIN EXPOSURE CORRECTION DSP OPTIMIZATION	Built-in Test	Gain Control	Time Exposure Control	Gamma Correction
	PBIT – IBIT – CBIT	MGC - AGC	MEC- AEC	0.45 – 0.7 – 1 + blending mode
	Sensor Correction	Contrast Correction	H-V Flip	Noise Filter
	Blemish correction	Manual or Automatic DRC	Yes with no latency	N/A
	Binning Mode	Sharpness	eZOOM	Non-uniformity Correction
	Digital ×2 ×4 ×8	Manual or automatic	N/A	N/A
	Color Calibration	White Balance	Debayer	Color Saturation
	3×3 Color conversion 5600K, 3700K, 3100K D65	Manual or Automatic	Bilinear	Manual or Automatic

**HOUSING**

MECHANICAL	Housing Size [W × L × D]	Lens Mount	Weight
	40 × 50 × 35 mm <sup>3</sup>	C-Mount	<150g

**INTERFACE**

VIDEO COM POWER SYNCHRO	Control Interface	Power Supply	Video SDI or CXP	Analog Video
	RS485/422 GenICam XML File	7-28 Vdc	SMPTE 292 1080p 25-30-50-60 Hz or CXP 6.25 Gb/s	PAL or NTSC
	General I/O	Power Consumption	External Synchro	Coding
	RS485/422 (×3)	4 W	RS485/422	YCrCb 4:2:2 10 bit 8-10-12 bit CXP

**ENVIRONMENTAL**

TEMPERATURE HUMIDITY SHOCKS VIBRATION EMI / EMC CE / IPC	Temperature	Humidity	Shocks	Vibration
	[-40°C – +71°C] functional	75% max	40g half sinus 11ms	4.5 g rms [100Hz – 1,000Hz]
	EMI	EMC	Grounding	Acceptability
	CE (2014/30/EU)	CE (2014/30/EU)	<10 mΩ	IPC-A610 Class3

**PART NUMBER**

P/N	LHC2M4N.5P03MNST20: SMPTE Video Output LHC2M4N.5P03MNST21: CXP Video Output Includes: Graphic Unit Interface (GUI), Video Cable, Pre-wired IO & Power Connector
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